



Sue's View — From Over Here

By Susan Beal, DVM

A Note to Our Readers: There's been a lot of growth over the last months at PASA, including adding Susan Beal, DVM to the team in the part-time position of Agricultural Science Advisor. Susan brings with her a history of working with us in various capacities, as well as a solid background in holistic medicine. She is interested in whole farm ecology, particularly pasture based farming.

Greetings all, when a friend of mine and I were talking about the transition to working on the PASA team, I showed him my job description. He read the page of material thoughtfully, looked up and said simply, "I could have said all that in two words. Why'd they take all up this paper?" I looked at him in wonder. "Simple," he said. "Help Farmers."

That says it all. Depending on the day, that "help farmers" might be visiting a local dairy farm to discuss adding some stability to local dairy ventures, checking references for the food safety bill, gathering information concerning greenhouse gas emissions, interfacing with farmers and eaters, visiting with landowners preparing to make the transition to farmers as they plan how to use their under-used land for grazing...all with the bottom line goal to, as my friend so succinctly put it — help farmers.

Over the years I've found that there tends to be a big question in many folks' minds about what constitutes science and what does that science stuff have to do with the reality of what they do day to day. When we make those polarizations and judgments, we estrange ourselves from science, either ignoring it or putting it on a pedestal, deeming it far out of reach of the everyman. More significantly, we estrange ourselves from the experience of integrating the connections in our world and in our experiences.

Folks may have the idea that science is only found when we talk about genetic modifications of food, or in calculating fertilizer application rates or...but — at least in my reality — there is as much science in the wonders that bring about peas sprouting from those hard seeds placed in the cold ground, in the manner in which milk morphs to cheese, in the transformation of sunlight to grass, in watching how a cow minds her calf...

The article about the Rosenbergers (see front cover) reminds me about conversations I have with farmers and eaters concerning grass fed/grass finished beef.

There are many parts of the story of grass fed/grass finished beef that are really significant. The lack of exposure to bovine spongiform encephalopathy (BSE) prion is one of them, as is the paucity of E coli O157:H7, but the nutritional aspects of the meat are most often cited. Often talking nutrition and grass fed meat involves a whole bunch of numbers and listeners' eyes glaze over. Incomplete understanding of the data provides some fuel for the naysayer, too, like trying to sell the advantage of half the fat and twice the conjugated linoleic acid (CLA)...doesn't that work out to the same amount of CLA per unit?

It's the fat of grass fed and finished beef that's the "good stuff." It makes no sense at all to go to all the time and trouble to raise this special fat and then eliminate it in the final product by trimming close or grinding a lean burger. The fat in this meat is distributed differently than that of grain/corn finished, sitting among the muscle cells in small flecks — very different than the large marbled clumps of grain fed fat (which also tends to sit in eaters' blood vessels in large clumps).

Folks have used CLA to "sell" the benefits of grass fed/finished beef for a long

time. But there is a more compelling argument to be made: the ratio of Omega 6 to Omega 3 fatty acids. That ratio is the sure fired way one can differentiate "real" grass beef and beef that has had some grain in the finish.

In beef that has been raised on momma's milk, grass and forages only, the ratio between Omega 6 fatty acids and Omega 3 fatty acids (the "6:3 ratio") is always less than 2:1, and is, in fact, often closer to 1.2–1.5 to 1. That means every pile of Omega 6 there is a pile of Omega 3 that is half that size. Nutritionists suggest that the optimal ratio is something under 4:1.

In grain-finished beef (in feedlots and on farm), the Omega 6:3 ratio is in the neighborhood of 18:1 to 20:1. Think of the different size piles you would need to illustrate that...

And in beef that has been fed grain for a shorter time than the typical grain finished animal (say, those last two weeks of finish, just to "polish 'em up"), we find Omega 6:3 ratios between 10:1 and 12:1. This is seen with even a relatively short time/small amount of grain.

So what? Think about all the advice that is being given about the need to increase the Omega 3 fatty acids in one's diet and/or supplement program. Consider the products being sold with added Omega 3s (eggs and yoghurt are common examples). That advice stems from a need to compensate for a diet that is heavy on the Omega 6 side and that skews the desired 1:4 or less ratio.

So, if we're eating meat that has a high 6:3 ratio, we'll need proportionately more Omega 3 to "even out" that ratio and get it in line with the desired 4:1 or less. It's not that we are Omega 3 deficient. It's that we are relatively Omega 6 excess. Doesn't it make sense to eat foods that do not contribute to that excess?

I invite folks to call or send me a note (at susan@pasafarming.org or plain old pen and paper) and let me know what's on your mind. It may be about a wonder you might have, about an observation that you've made, about something you've tried with your stock or your pastures or your plants. It may be a specific question or series of questions. We plan to make this column a regular part of the newsletter — and it can be as interactive as you folks want it to be. ■